

Sub
C7
B
concl.
processing device when the DTMF command signal from the telephone unit indicates one of the plurality of telephone services; and

starting execution of a telephone service processing of the data processing device for the telephone service indicated by the command signal from the telephone unit when it is determined by the determining that the command signal is from the telephone unit.

REMARKS

In accordance with the foregoing, claims 1, 10, 16 and 17 have been amended. Claims 7 and 14 have been cancelled without prejudice or disclaimer. Claims 1-6, 8-13 and 15-17 are pending and under consideration.

On page 2, in paragraph number 2 of the Office Action, claim 1-17 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent number 5,898,756 to Manning et al. in view of U.S. Patent number 5,864,607 to Rosen et al. in further view of U.S. Patent number 6,208,966 to Bulfer. The rejection is respectfully traversed as it relates to claims 1-6, 8-13 and 15-17, claims 7 and 14 having been cancelled without prejudice or disclaimer.

Manning et al. mentions a speed dialer system that includes a switchable A.C. load 200, a tone/signal generator 300 and a DTMF/tone detector 210. Manning et al. further mentions detecting a DTMF dialing signal sent from a telephone network by using the dialer 210 and attenuating a DTMF signal sent from the telephone network (via tip line 20 from telephone 30 or 32) by closing the switch 200, thereby inhibiting transmission of the DTMF signal. Manning et al. neither teaches nor suggests the detection of a specific one of a plurality of telephone services of the data processing device, indicated by the DTMF command signal (having a predetermined value different from a network DTMF dialing signal) from the telephone unit, according to the amended claim 1, which recites "a command signal recognition unit either detecting a Dual Tone MultiFrequency (DTMF) command signal sent from the telephone unit or a network DTMF command signal sent from the telephone network, and determining, when the DTMF command signal is from the telephone unit, which one of a plurality of telephone services of the data processing device the DTMF command signal from the telephone unit indicates, wherein the command signal recognition unit includes a DTMF detection unit that detects the network DTMF signal sent from the telephone network, the DTMF command signal from the telephone unit having a predetermined value different from a value of the network DTMF signal."

Amended claim 1 is supported by the preferred embodiment shown in FIG. 2 and described in the specification on page 16, lines 1-11, and page 21, lines 14-18. For example, the specification discloses and as shown in FIG. 2 that a DTMF command signal used by the present invention has a defined value, such as *2, that is not ordinarily used to indicate a telephone number (such as "0" to "9") of a destination telephone unit in the telephone network. The DTMF detection unit recited in the amended claim 1 corresponds to, for example, the DTMF detection unit 107 shown in FIG. 8 and described in the specification at page 21, lines 14-18.

Further, Manning et al. neither teaches nor suggests the signal transmission inhibition unit which inhibits transmission of the DTMF command signal from the telephone unit to the telephone network and allows transmission of the DTMF command signal directly to the data processing device when the command signal from the telephone unit indicates one of the plurality of telephone services, according to the amended claim 1, which recites "a signal transmission inhibition unit that selectively inhibits transmission of the DTMF command signal from the telephone unit to the telephone network and allows transmission of the DTMF command signal directly to the data processing device when the DTMF command signal indicates one of the plurality of telephone services."

Rosen does teach communication with a computer using telephones. However, Rosen does not solve the deficiencies noted above regarding Manning. Bulfer does teach the conversion of voice into DTMF tones. However, Bulfer does not solve the deficiencies noted above regarding Manning and Rosen. Therefore, the combination of Manning, Rosen and Bulfer neither teaches nor suggests amended claim 1, which recites "a command signal recognition unit either detecting a Dual Tone MultiFrequency (DTMF) command signal sent from the telephone unit or a network DTMF command signal sent from the telephone network, and determining, when the DTMF command signal is from the telephone unit, which one of a plurality of telephone services of the data processing device the DTMF command signal from the telephone unit indicates, wherein the command signal recognition unit includes a DTMF detection unit that detects the network DTMF signal sent from the telephone network, the DTMF command signal from the telephone unit having a predetermined value different from a value of the network DTMF signal."

Independent claims 10, 16 and 17 are allowable for reasons similar to those discussed above in relation to claim 1. For example, claim 16 recites "either detecting a Dual Tone Multi-

Frequency (DTMF) command signal sent by the telephone unit or a network DTMF command signal sent from the telephone network, wherein the DTMF command signal from the telephone unit has a predetermined value different from a value of the network DTMF signal." Claims 2-6, 8, 9, 11-13 and 15 are allowable as depending on claims 1 and 10 respectively, as well as for the additional features recited therein.

Reconsideration and withdrawal of the rejection of claims 1-6, 8-13 and 15-17 under 35 U.S.C. §103 is respectfully requested.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 21 Mar 02

By: Heath E. Wells
Heath E. Wells
Registration No. 43,257

700 Eleventh Street, NW, Suite 500
Washington, D.C. 20001
(202) 434-1500

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please CANCEL claims 7 and 14 without prejudice or disclaimer.

Please AMEND claims 1, 10, 16 and 17 as follows:

1. (TWICE AMENDED) A communication support system which is adapted to connect a telephone unit through a communication control device to a data processing device and adapted to connect a telephone network to the communication control device, the communication support system comprising:

a command signal recognition unit either detecting a Dual Tone MultiFrequency (DTMF) command signal sent from the telephone unit or a network DTMF command signal sent from the telephone network, and determining, when the DTMF command signal is from the telephone unit, which one of a plurality of telephone services of the data processing device the DTMF command signal from the telephone unit indicates, wherein the command signal recognition unit includes a DTMF detection unit that detects the network DTMF signal sent from the telephone network, the DTMF command signal from the telephone unit having a predetermined value different from a value of the network DTMF signal;

a signal transmission inhibition unit that selectively inhibits transmission of the DTMF command signal from the telephone unit to the telephone network and allows transmission of the DTMF command signal directly to the data processing device when the DTMF command signal indicates one of the plurality of telephone services; and

a telephone service processing unit that performs a telephone service processing of the data processing device for the telephone service indicated by the DTMF command signal from the telephone unit, the telephone service processing unit starting execution of the telephone service processing when the command signal recognition unit determines that the DTMF command signal is from the telephone unit.

10. (TWICE AMENDED) A communication control device adapted to connect a telephone unit and a data processing device through the communication control device and adapted to connect a telephone network to the communication control device, comprising:

a line switching unit alternately providing either connection of the telephone unit and the telephone network through the line switching unit or disconnection of the telephone network from the telephone unit;

a command signal recognition unit that detects either a Dual Tone Multi-Frequency (DTMF) command signal sent from the telephone unit or a network DTMF command signal sent from the telephone network, and determines whether the DTMF command signal is from the telephone unit, when the DTMF command signal from the telephone unit indicates one of a plurality of telephone services of the data processing device, wherein the command signal recognition unit includes a DTMF detection unit that detects the network DTMF signal sent from the telephone network, the DTMF command signal from the telephone unit having a predetermined value different from a value of the network DTMF signal; and

a signal transmission inhibition unit that selectively inhibits transmission of the command signal from the telephone unit to the telephone network and allows transmission of the DTMF command signal directly to the data processing device when the DTMF command signal from the telephone unit indicates one of the plurality of telephone services.

16. (TWICE AMENDED) A telephone service processing method in a communication support system which is adapted to connect a telephone unit through a communication control device to a data processing device and adapted to connect a telephone network to the communication control device, the method comprising the steps of:

either detecting a Dual Tone Multi-Frequency (DTMF) command signal sent by the telephone unit or a network DTMF command signal sent from the telephone network, wherein the DTMF command signal from the telephone unit has a predetermined value different from a value of the network DTMF signal;

detecting, when the DTMF command signal is from the telephone unit, the DTMF command signal indicating one of a plurality of telephone services of the data processing device;

inhibiting transmission of the DTMF command signal from the telephone unit to the telephone network and allowing transmission of the command signal to the data processing device when the DTMF command signal indicates one of the plurality of telephone services; and

starting execution of a telephone service processing using the data processing device for the telephone service indicated by the command signal from the telephone unit when it is determined in said determining step that the command signal is from the telephone unit.

17. (TWICE AMENDED) A computer readable medium storing program code

causing a processor to perform a method executing a telephone service in a communication support system which is adapted to connect a telephone unit through a communication control device to a data processing device and adapted to connect a telephone network to the communication control device, said method comprising:

detecting either a Dual Tone Multi-Frequency (DTMF) command signal sent by the telephone unit or a network DTMF command signal sent from the telephone network, wherein the DTMF command signal from the telephone unit has a predetermined value different from a value of the network DTMF signal;

determining whether the DTMF command signal is from the telephone unit, the DTMF command signal is from the telephone unit, the DTMF command signal from the telephone unit indicating one of a plurality of telephone services of the data processing device;

inhibiting transmission of the DTMF command signal from the telephone unit to the telephone network and allowing transmission of the DTMF command signal directly to the data processing device when the DTMF command signal from the telephone unit indicates one of the plurality of telephone services; and

starting execution of a telephone service processing of the data processing device for the telephone service indicated by the command signal from the telephone unit when it is determined by the determining that the command signal is from the telephone unit.